

Association of dodecylsulfate ions with ethylenediamine dihydrochloride

Amirov R., Saprykova Z., Ibragimova Z., Ulakhovich N.
Kazan Federal University, 420008, Kremlevskaya 18, Kazan, Russia

Abstract

The effect of sodium dodecylsulfate (SDS) on the acid-base properties of ethylenediamine (En) is studied at 308 K using potentiometric titration. Reduction of the acid function of EnH_2^{2+} cation ($\Delta pK_{\text{max}} \approx 1.6$) is found at the surfactant concentration C_s below the critical micellization concentration (CMC), while SDS micelles do not produce any additional effect. The effect found is accounted for by the formation of strong associates between the EnH_2^{2+} and DS-ions ($\log K_{\text{as}} \approx 6.5$). © 1996 MANK Hayka/Interperiodica Publishing.
